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# **Environment and Climate Research Center**

# **Policy Study Institute**

Placing a value on residents' preferences for improved urban green spaces and the services they provide in Addis Ababa, Ethiopia

Evaluating resident's preferences for improved urban green space is vital to planning for green cities.

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# EfD DRB (Discussion Paper Research Brief) 19-02, April 2019

Sustainable Development Goal (SDG) 11 intends to "make cities and human settlements inclusive, safe, resilient and sustainable". Healthy urban ecosystems are the foundation for sustainable cities. Improvement of urban green spaces and the services they provide can promote urban sustainability. Conserving and restoring ecosystems in urban areas can reduce the ecological footprints of cities while enhancing resilience, health, and quality of life for their inhabitants.



Figure 1: Neighborhood Park in Addis Ababa

The loss of ecosystems in cities may involve high long-term economic costs and severe impacts on social, cultural, and economic values. However, it is difficult to put a number on the benefits of urban green space. There has not been enough research on what people in developing countries want in urban green spaces and how much they are willing to pay for these benefits.

In Ethiopia, urbanization has recently started increasing, especially in Addis Ababa, the capitol and by far the largest city in Ethiopia. The current growth trajectory of Addis Ababa is unsustainable due to extensive urban poverty, inadequate housing, severe overcrowding and congestion, and undeveloped physical infrastructure. These factors have placed green areas under extreme pressure; consumed the natural and scenic beauty of the landscape; and altered the attractiveness of the city, thereby threatening the ability of urban green areas to perform their basic ecological, social and economic functions. Thus, this research contributes to sustainable urbanization by asking about the value that residents place on potential improvements to urban green spaces in Addis Ababa, Ethiopia. To place a value on the benefits provided by urban green spaces, we presented residents with scenarios about urban amenities and nature restoration programs.



Figure 2: Urban agriculture and greening practices in Addis Ababa

## **Findings**

We found that residents would be willing to pay up to 64 Ethiopian Birr (ETB) per month (about USD 2.28) for availability of a large multi-use park close to their homestead. Residents are less willing to pay as the distance from the park to their neighborhood increases. Their next preference was for access to a green route that would give them the option to walk or ride a bicycle into the city center without traffic congestion. For this, they would pay up to 6.8 ETB per kilometer per month. For development of spaces for urban agriculture practices, they would pay up to 4.4 ETB per month per percentage improvement.

Residents also were willing to pay for urban nature restoration programs, up to 7.64 ETB per month for each percent improvement of urban forest cover. They prefer urban forest conservation to rivers and streams rehabilitation.

Our results highlight that city planners should consider the variations in residents' preferences for urban green space and the services they provide.

### **Conclusions**

A decline in availability of and access to green and natural areas for urban residents may have detrimental effects on human health and economies. This study contributes to the limited research in urban ecosystem valuation in developing countries. We identified two program scenarios: the urban green areas and economic space development program and the nature

restoration and conservation program to analyse people's preferences for urban green areas in Addis Ababa, Ethiopia. Our findings highlighted that taking into consideration the variation in residents' preferences for improved urban ecosystems is vital to support planning and management efforts.

**About this brief:** This brief is based on results from: Dawit W. Mulatu, Jessica Alvsilver, and Juha Siikamäki (2019), Valuing residents' preferences for improved urban green space ecosystem services in Addis Ababa, Ethiopia, EfD Discussion Paper 19-02.

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### **Key notes:**

- Urban ecosystems and the services they provide have substantial impact on human well-being in cities.
- Urban resident have a variety of preferences for improved urban green spaces, including nearby parks, more forest cover, and urban agriculture.
- Evaluating these preferences is essential to prioritizing among alternatives in urban planning, in order to build green cities.